

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-373479

(43)Date of publication of application : 26.12.2002

(51)Int.Cl.

G11B 23/38
G11B 23/107

(21)Application number : 2001-178656

(71)Applicant : FUJI PHOTO FILM CO LTD

(22)Date of filing : 13.06.2001

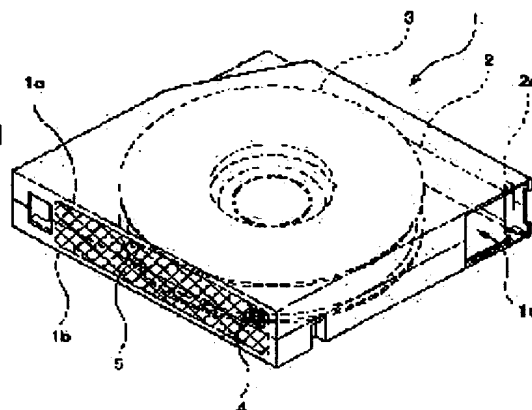
(72)Inventor : ISHIOROSHI TAKAHIRO

(54) MAGNETIC TAPE CARTRIDGE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a magnetic tape cartridge, whose identification display can be read in the state of being housed in a transparent protective case, so as to enable quality control of the product after completion of manufacture, and which is also superior in appearance commodity value.

SOLUTION: The magnetic tape 2 cartridge is constituted of a cartridge case 1, provided with a two-dimensional code 4 as an identification display and a reel 3, wound around with the magnetic tape 2 rotatably housed in the cartridge case 1. The two-dimensional code 4 is placed on a label zone 5 of the cartridge case 1.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

[Claim(s)]

[Claim 1] A magnetic tape cartridge to which a reel by which a magnetic tape was looped around in a cartridge case is held enabling a free revolution, it is the magnetic tape cartridge which comes to give this cartridge case a two dimensional code as a discernment display, and said two dimensional code is characterized by giving a label zone among said cartridge cases.

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention is used mainly for the record regenerative apparatus of a computer, and relates to the magnetic tape cartridge which records voice, an image, a sign, etc. magnetically.

[0002]

[Description of the Prior Art] The reel by which the magnetic tape was looped around in the cartridge case is held enabling a revolution free as a magnetic tape cartridge which this invention persons developed, and the thing which comes to print the two dimensional code as a discernment display is in this cartridge case.

[0003] It becomes possible to also secure the appearance of a product including the discernment display which is small and is not conspicuous, securing the reliability of the quality of the whole product, since [according to this magnetic tape cartridge] the identification information of the proper which is needed on quality control is displayed by the two dimensional code as a discernment display.

[0004]

[Problem(s) to be Solved by the Invention] By the way, since the magnetic tape cartridge for backup of a computer is for saving the important data obtained as a result of economic activities, such as an enterprise, for a long period of time, it needs to secure very high reliability. Therefore, the discernment display given to the cartridge case is put in by not only until a magnetic tape cartridge carries out the completion of

manufacture but the protective case transparent after that, also after a film pack is carried out, it is read by machine, the product is packed up by which box, and to be carried out as part of quality control till where it was sent is desired.

[0005] Then, the technical problem of this invention is to offer the magnetic tape cartridge excellent in the exterior check as products while being able to perform reading of a discernment display, putting into a transparent protective case so that quality control of the product after the completion of manufacture may be attained.

[0006]

[Means for Solving the Problem] That is, it is the magnetic tape cartridge which holds a magnetic tape cartridge concerning this invention for a reel by which a magnetic tape was looped around in a cartridge case, enabling a free revolution, and comes to give this cartridge case a two dimensional code as a discernment display, and said two dimensional code is characterized by giving a label zone among said cartridge cases.

[0007] According to the magnetic tape cartridge concerning this invention, a two dimensional code as a discernment display is given to a label zone for sticking a label which a user uses for filing of a magnetic tape cartridge. Since a label zone is required here in order that a user may grasp a content recorded on a magnetic tape at a glance, it is prepared in every magnetic tape cartridge. Moreover, a portion which covers a label zone of a transparent protective case from the label zone being visible from outside also where a magnetic tape cartridge is put into a transparent protective case is designed so that neither an index form nor other labels may be located. Therefore, a two dimensional code as a discernment display attached by this invention can perform reading of a two dimensional code as a discernment display, putting into a transparent protective case. That is, it is put in by protective case not only with between until manufacture of a magnetic tape cartridge is completed but a transparent magnetic tape cartridge, and after the manufacture is completed, quality control of a product is attained.

[0008] On the other hand, after a user starts an activity of a magnetic tape, it is that a label is stuck from a top, and a two dimensional code will hide and disappear and this two dimensional code will not affect appearance of a magnetic tape cartridge.

[0009] In addition, a two dimensional code is an information code given to a cartridge case as a discernment display, and information in which optical reading is possible is located in a line with two-dimensional [of X and Y]. Moreover, all the acts that display a two dimensional code on a cartridge case as a discernment display, such as pasting up an object which displays a two dimensional code not only on printing a two dimensional code but on a cartridge case on a cartridge case, are included in ***** which gives a two dimensional code to a cartridge case.

[0010]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained to details based on an accompanying drawing.

[0011] The perspective diagram showing the outline configuration of the magnetic tape cartridge which drawing 1 requires for the gestalt of 1 operation of this invention, the front view showing the details configuration of a two dimensional code [in / in drawing 2 / this magnetic tape cartridge], and drawing 3 are the perspective diagrams showing the condition of having been put in by the protective case with this transparent magnetic tape cartridge.

[0012] The magnetic tape cartridge in the gestalt of this operation is a magnetic tape cartridge for backup used as a record medium in the record regenerative apparatus of a computer. Specifically, this magnetic tape cartridge consists of the cartridge case 1, a magnetic tape 2, a single tape reel 3, and a two dimensional code 4 as a discernment display, as shown in drawing 1 . Hereafter, each component is explained to details.

[0013] (1) Cartridge case 1 cartridge case 1 plays the role which holds a tape reel 3 free [a revolution] inside, as shown in this drawing.

[0014] As shown in this drawing, this cartridge case 1 is a flat box which presents an abbreviation square by plane view, and, specifically, unifies top case 1a and bottom case 1b by the bis-stop (outside of a graphic display).

[0015] As shown in this drawing, the label zone 5 (crosshatching shows drawing 1 thru/or drawing 3) for sticking the label which a user uses for filing of a magnetic tape cartridge is established in such the 1 side-attachment-wall section of a cartridge case 1. By being prepared in every magnetic tape cartridge and sticking a label on the label zone 5, a user glances at the content recorded on the magnetic tape, and can grasp such a label zone 5 now. Here, the label zone 5 is a field usually low one step so that a user may see and understand. Moreover, although the label zone 5 is established in the side-attachment-wall section in many cases, it may be established in the upper surface section etc.

[0016] In addition, opening 1c for pulling out the magnetic tape 2 constituted free [closing motion] with the slide door (outside of a graphic display) is established by the 1 side-attachment-wall section of a cartridge case 1.

[0017] (2) In plastic material, the magnetic tape 2 kneads magnetic powder materials, such as ferric oxide, to homogeneity, is full, form it in the film of fixed width of face, and use it for magnetic record of data, such as voice, an image, and a sign.

[0018] As shown in this drawing, specifically, the tape reel 3 which carries out a postscript is looped around this magnetic tape 2. And reader pin 2a is prepared in the free edge of this magnetic tape 2. Thereby, the drawer by the tape loading mechanism

(outside of a graphic display) of a record regenerative apparatus (outside of a graphic display) is possible for this magnetic tape 2.

[0019] (3) Tape-reel 3 tape reel 3 plays the role which loops around the magnetic tape 2 which was described above.

[0020] This tape reel 3 is held free [a revolution] in the cartridge case 1, as described above. And when a magnetic tape cartridge is set in a record regenerative apparatus, and the drive (outside of a graphic display) of a record regenerative apparatus works, it positive-rotates or this tape reel 3 rotates reversely. At this time, when the tape loading mechanism (outside of a graphic display) of a record regenerative apparatus works [this drive], through opening 1c, the magnetic tape 2 around which this tape reel 3 was looped will be pulled out from a tape reel 3, or will be rolled round by the tape reel 3.

[0021] (4) The 42-dimensional two dimensional code code 4 is given to the label zone 5 among cartridge cases 1 as a discernment display, as shown in this drawing. This two dimensional code 4 is the object which performs chiefly optical automatic reading according the identification information of the proper which is needed on quality control to a machine, and is displayed.

[0022] Here, the identification information which becomes this two dimensional code 4 from black and a white pattern is printed. This identification information is recorded by the method of leaving coloring layer 4b for surface-layer 4a after spreading and by laser radiation in the black coatings on coloring layer 4b applied to the cartridge case 1 in the white coatings, and removing the coating of surface-layer 4a, as shown in drawing 2 .

[0023] in addition -- as such a two dimensional code 4 -- for example, the CP code and a data code -- there are a code, the QR code, PDF417, a KARURA code, a maxi code, etc. very.

[0024] Here, as shown in drawing 3 , the portion which covers the label zone 5 of the transparent protective case 11 is designed so that neither the index form 12 nor other labels may be located. That is, the label zone 5 is visible from outside also in the condition of having been put in by the protective case 11 with a transparent magnetic tape cartridge. So, an operator can perform optical automatic reading of the two dimensional code 4 in the label zone 5, putting a magnetic tape cartridge into the transparent protective case 11. On the other hand, the label for filing of a magnetic tape cartridge is stuck on the label zone 5 after a user starts the activity of a magnetic tape 2 by the user from a top. By this, the two dimensional code in the label zone 5 will hide, and will not be visible. So, after a user starts the activity of a magnetic tape, the two dimensional code as a discernment display will not affect the appearance of a magnetic tape cartridge.

[0025] Since the two dimensional code 4 is given to the label zone 5 according to the

magnetic tape cartridge concerning the gestalt of this operation as explained above, reading of a two dimensional code 4 can be performed putting into the transparent protective case 11. Therefore, not only between until manufacture of a magnetic tape cartridge is completed but after the manufacture was completed, quality control of a product was attained. Moreover, since the two dimensional code in the label zone 5 hides in the bottom of a label and disappears after a user starts the activity of a magnetic tape, affecting the appearance of a magnetic tape cartridge of it is lost. It can be said that the magnetic tape cartridge which starts the gestalt of this operation in this semantics is excellent in an exterior check as products as compared with the magnetic tape cartridge which the two dimensional code has exposed after the user started the activity of a magnetic tape.

[0026]

[Effect of the Invention] While according to this invention being able to perform reading of a discernment display, putting into a transparent protective case so that quality control of the product after the completion of manufacture may be attained, offer of the magnetic tape cartridge excellent in the exterior check as products is attained.

[0027] Then, the technical problem of this invention is to offer a magnetic tape cartridge.

[Brief Description of the Drawings]

[Drawing 1] It is the perspective diagram showing the outline configuration of the magnetic tape cartridge concerning the gestalt of 1 operation of this invention.

[Drawing 2] It is the front view showing the details configuration of the two dimensional code in the magnetic tape cartridge concerning the gestalt of 1 operation of this invention.

[Drawing 3] It is the perspective diagram showing the condition of having been put in by the protective case with the transparent magnetic tape cartridge concerning the gestalt of 1 operation of this invention.

[Description of Notations]

- 1 -- Cartridge case
- 1a -- Top case
- 1b -- Bottom case
- 1c -- Opening
- 2 -- Magnetic tape
- 2a -- Reader pin
- 3 -- Tape reel
- 4 -- Two dimensional code
- 4a -- Surface layer

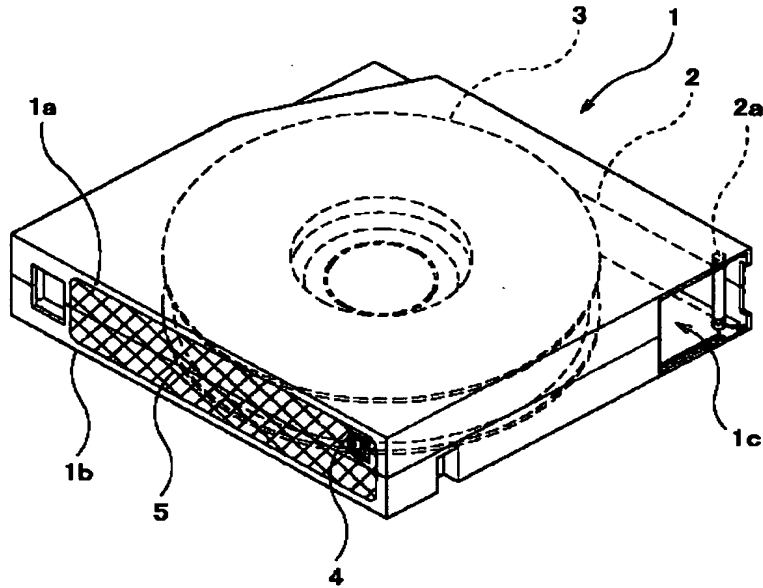
4b -- Coloring layer

5 -- Label zone

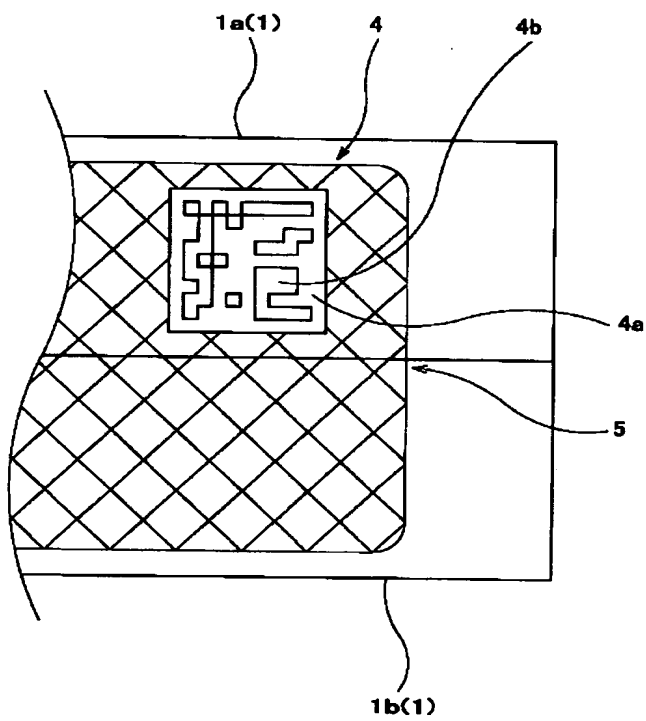
11 -- Protective case

12 -- Index form

[Drawing 1]



[Drawing 2]



[Drawing 3]

